

FORM
2A

Rev
08/13

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

401434628

Date Received:

01/19/2018

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: _____

This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

455283

Expiration Date:

05/31/2021

This location assessment is included as part of a permit application.

CONSULTATION

- This location is included in a Comprehensive Drilling Plan. CDP # _____
- This location is in a sensitive wildlife habitat area.
- This location is in a wildlife restricted surface occupancy area.
- This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 100322
 Name: NOBLE ENERGY INC
 Address: 1001 NOBLE ENERGY WAY
 City: HOUSTON State: TX Zip: 77070

Contact Information

Name: Brittany McFadden
 Phone: (281) 943-1940
 Fax: ()
 email: brittany.mcfadden@nblenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030009 Gas Facility Surety ID: _____
 Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: H Number: 25-15 Pad
 County: WELD
 Quarter: SWSE Section: 25 Township: 3N Range: 65W Meridian: 6 Ground Elevation: 4805

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 285 feet FSL from North or South section line
1805 feet FEL from East or West section line

Latitude: 40.189670 Longitude: -104.609270

PDOP Reading: 1.8 Date of Measurement: 04/03/2017

Instrument Operator's Name: Scott Sherard

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # **FORM 2A DOC #**

Well Site is served by Production Facilities

401432230

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	6	Oil Tanks*	_____	Condensate Tanks*	_____	Water Tanks*	_____	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	6	Separators*	_____	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	_____
Gas or Diesel Motors*	_____	Electric Motors	_____	Electric Generators*	_____	Fuel Tanks*	_____	LACT Unit*	_____
Dehydrator Units*	_____	Vapor Recovery Unit*	_____	VOC Combustor*	_____	Flare*	_____	Pigging Station*	_____

OTHER FACILITIES*

Other Facility Type

Number

Other Facility Type	Number

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

(6) 2"-4" steel three phase flowlines, and (3) 4"-8" poly temp water lines.

CONSTRUCTION

Date planned to commence construction: 06/06/2018 Size of disturbed area during construction in acres: 7.30
Estimated date that interim reclamation will begin: 03/01/2019 Size of location after interim reclamation in acres: 2.40
Estimated post-construction ground elevation: 4805

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes
Is H₂S anticipated? No
Will salt sections be encountered during drilling: No
Will salt based mud (>15,000 ppm Cl) be used? No
Will oil based drilling fluids be used? Yes

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal
Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Drilling waste disposal information added to address non-oil based mud and fluids used in non-producing portion of wellbore.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Wes Moser, Inc.

Phone: _____

Address: P.O.Box 205

Fax: _____

Address: _____

Email: _____

City: Fort Lupton State: CO Zip: 80621

Surface Owner: Fee State Federal Indian

Check all that apply. The Surface Owner: is the mineral owner
 is committed to an oil and Gas Lease
 has signed the Oil and Gas Lease
 is the applicant

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation 11/15/2016

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP
Non-Crop Land: Rangeland Timber Recreational Other (describe): _____
Subdivided: Industrial Commercial Residential

Future Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP
Non-Crop Land: Rangeland Timber Recreational Other (describe): _____
Subdivided: Industrial Commercial Residential

CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	2386 Feet	_____ Feet
Building Unit:	2468 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	1642 Feet	_____ Feet
Above Ground Utility:	1249 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	285 Feet	_____ Feet

INSTRUCTIONS:
 - All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
 - Enter 5280 for distance greater than 1 mile.
 - Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
 - Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.
 -For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

- Buffer Zone
- Exception Zone
- Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
 - Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
 - Urban Mitigation Area - as defined in 100-Series Rules.
 - Large UMA Facility – as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____
 Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onl or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 72 - Vona loamy sand, 0 to 3 percent slopes
 NRCS Map Unit Name: 19 - Colombo clay loam, 0 to 1 percent slopes
 NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes No

Plant species from: NRCS or, field observation Date of observation: _____

List individual species:

Check all plant communities that exist in the disturbed area.

- Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- Alpine (above timberline)
- Other (describe): _____

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 1615 Feet

water well: 1013 Feet

Estimated depth to ground water at Oil and Gas Location 15 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area determination: Within 100-year floodplain.
The man-made pond is the nearest surface water body and is approximately 1,615 east of the edge of the H25-15 pad location.
Down-gradient surface water: Box Elder Creek 4500' east.
Yes, monitoring well #37833-M appears to be the closest well and is approximately 1,013 feet from the Emmy State H25-744 reference well
Domestic water well: Permit 223798 (1900' northeast)
Ground water at oil and gas location: Permit 22398 SWL 120' (1900' northeast)

Is the location in a riparian area: No Yes

Was an Army Corps of Engineers Section 404 permit filed No Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

Is the Location within a Floodplain? No Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on _____

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area

Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)

Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)

Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)

Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

Noble respectfully submits this proposed location assessment. The referenced proposed wells will be produced at the H25-14 production facility located approx 2490' W.

Existing gas line(s) will be steel plated and shut-in prior to construction operations.

In regards to this pad being 4500' from the nearest down-gradient surface water, and yet still located within a floodplain; this land is fairly flat and flood waters can extend a significant distance from the source channel. This is our only location within a floodplain.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 01/19/2018 Email: brittany.mcfadden@nblenergy.com

Print Name: Brittany McFadden Title: Regulatory Analyst

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 6/1/2018

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

	Operator shall not complete the wells on this Location prior to approval of the Form 2A for the related remote production facility.
	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	The H25-15 well pad lies within the FEMA 100-year floodplain delineation. The pad will incorporate drainage and hydrologic considerations during design and construction with wellheads and flowlines oriented parallel with floodwater flow and automation for immediate, remote shut in capabilities. Structural guards/barriers will be installed upstream of wellheads to deflect flood debris, vulnerable slopes will be stabilized, and access road lengths will be minimized.
2	General Housekeeping	Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with storm water runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
3	Wildlife	Brush/Mow Hog August 1 - March 31. Conduct avian nest surveys within 50' of disturbance 1-3 days prior to ground clearing for MBTA compliance, March 1 -July 31. Raptor nest clearance survey prior to construction, drilling, and completions operations initiated between Feb 1- July 31.
4	Storm Water/Erosion Control	The basis for the Sensitive Area Determination for H25-15 is the site lies within the 100-year floodplain of Box Elder Creek, which is located approximately 4,500 feet to the East. The area between the site and Box Elder Creek is irrigated cropland, with additional separation provided by WCR 49. Although stormwater from the site is unlikely to reach Box Elder Creek under these conditions, Noble will implement stormwater BMPs to minimize erosion and transportation of sediment off-site. The planned stormwater BMPs include stabilizing soil stockpiles with tracking and/or hydromulch; the use of stormwater diversions such as ditches; and BMPs that will slow stormwater runoff and settle out sediment, such as sediment traps and ripping. However, BMPs may be changed or modified during or after pad construction, as needed.
5	Material Handling and Spill Prevention	Flood Plain BMP: The well pad design will incorporate drainage and hydrologic considerations during design and construction with wellheads and flowlines oriented parallel with floodwaters flow and automation for immediate, remote shut in capabilities. Structural guards/barriers will be installed upstream of wellheads to deflect flood debris, vulnerable slopes will be stabilized, and access roads length will be minimized.
6	Dust control	Speed limits will be enforced. The traffic plan and route will include mitigation of impacts from temporary operations by applying water or magnesium chloride as dust suppression within 1000' of occupied residences and on leas roads as necessary in cooperation with the county.

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401434628	FORM 2A SUBMITTED
401508541	LOCATION DRAWING
401508542	LOCATION PICTURES
401508543	MULTI-WELL PLAN
401508546	HYDROLOGY MAP
401508547	SURFACE AGRMT/SURETY
401508548	WASTE MANAGEMENT PLAN
401528443	ACCESS ROAD MAP
401528501	NRCS MAP UNIT DESC

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	IN PROCESS - Out of date Waste Management Plan removed, operator indicated they will not land apply or beneficially reuse drilling fluids and cuttings. Operator requested the Wildlife BMP be removed.	06/01/2018
Final Review	Final Approval placed ON HOLD. Waste Management plan doc #2614238 is out of date and listed beneficial reuse sites have expired or been closed. Wildlife BMP missing text. Need to address timing of completions, flowback and start of production with offsite remote production facilities schedule in comment or COA.	05/25/2018
Permit	Final review complete.	05/24/2018
OGLA	Location is not in a designated setback area and is for wells only. OGLA review complete and task passed.	05/04/2018
Permit	ON HOLD: requesting corrected date of construction and interim reclamation. With operators concurrence corrected date of construction and interim reclamation. Permitting Review Complete.	04/26/2018
OGLA	OGLA review 2/16/18 - location is in a flood plain - need 603.h. BMPs. Surface water distance, water well distance and depth to groundwater do not appear to be correct - contact Operator via email. - Operator responded on 2/20/18 with concurrence to update water information and provided BMPs for 603.h. Check with Supervisor on Rule 912.	03/02/2018
LGD	This proposed oil and gas facility is in the Agricultural Zoned District of unincorporated Weld County. A Weld Oil and Gas Location Assessment, WOGLA17-0108 was Administratively Approved on December 14, 2017. Copies of related documentation are available from Weld County Government. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579.	02/05/2018
Permit	Passed Completeness.	01/31/2018
Permit	Returned to draft for: - attachment "NRCS MAP UNIT DESC" does not match the units named on the "Soil & Plant Community" tab - attachment "ACCESS ROAD MAP" is for a different location - "Water Resources" tab: the "Water Well sampling required per Rule" is left as "N/A"	01/29/2018

Total: 9 comment(s)